Model Implementation Conformance Statement
for the IEC 61850 interface in MVI56E-61850C

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UCA International Users Group
Testing Sub Committee

MICS template extracted from Server Test Procedures for Edition 2 TPCL 1.2.6

MICS Template for Server Ed2

1. Introduction

This model implementation conformance statement is applicable for MVI56E-61850C, with firmware version 1.01.022:

This MICS document specifies the modelling extensions compared to IEC 61850 Edition 2. For the exact details on the standardized model please compare the sample CID substation configuration file: “MVI56E-61850C.icd”, version 2021-09-21.

NOTE concerning the substitution of a CID file in place of the preferred ICD file:

The MVI56E-61850C is an embedded system whose primary purpose is to implement IEC 61850 client side communication between a IEC 61850 network and a companion controller, offering support for MMS polling, report and GOOSE subscriptions, and control operations. The MVI56E-61850C also can be configured to publish limited kinds of GOOSE data, for which it exposes a minimal server onto the 61850 network; this MICS document describes that server. The server is instantiated only if the user configures the MVI56E-61850C to publish GOOSE datasets; if GOOSE-publishing is not configured, the server does not exist and the MVI56E-61850C operates as a client only.

The MVI56E-61850C is configured by means of a dedicated Configuration Manager (CM) application that is closely integrated into the controller programming environment. When some GOOSE-publishing is configured causing the server to be instantiated, the CM’s duties include export of a CID file that describes that server as configured for the user’s specific application. This CID file is intended for import into external SCL tools as part of the description of an integrated substation. However, such a tool must deem this file to be read-only, because it cannot be re-imported into the MVI56E-61850C for effecting a reconfiguration (example: changing the IED name); instead, the CM must edit the existing configuration for such a change and re-export the CID file for the external SCL tool.

The CID file that accompanies this MICS is one of a suite of files that present a short example “project” (user’s configuration) for illustrating most of the features of the MVI56E-61850C. It is extensively annotated to identify and explain all configurable settings, with references to clauses of the IEC standard where appropriate.

Clause 2 contains the list of implemented logical nodes.

2. Logical Nodes List

The following table contains the list of logical nodes implemented in the device:

L: System Logical Nodes
LPHD (Physical device information)
LLN0 (Logical node zero)
G: Logical Nodes for generic references
GGIO (Generic process I/O)